

After this the Clouds thickened, and covered the Moon till the End of the Eclipse, which was about 8^h, 30', as near as I could guess through the Clouds.

The Night before the Eclipse, *viz.* 20 *December*, at 12^h, 14', I saw the Moon eclipse a Fixed Star, which, I think, is in the Heel of *Castor*.

These Two last Observations were made with an Eight Foot Telescope, my Watch being rectified to the apparent Time by correspondent Altitudes of the Sun, taken with the before-mentioned Quadrant for several Days together, before and after the Eclipse.

I must ask your Pardon for this long Trouble, and am,

S I R,

Your most humble Servant,

Cambridge in New-
England, Dec. 30.
1740.

John Winthrop.

III. *An Account of the Transit of Mercury over the Sun, Oct. 25. 1743. in the Morning, observed at Mr. Geo. Graham's House in Fleetstreet.*

Read Nov. 3. 1743. **T**HE Beginning could not be seen by reason of Clouds, but about 8^h, 45', *Mercury* was seen (through a reflecting Telescope Three Foot *Focus*, magnifying about 50 times) about Four or Five of his Diameters within the Sun's Limb.

At Mr. *Short's* House in *Surrey-street*, *Mercury* was seen just past the interior Contact 8^h, 30', 59'', through

through a reflecting Telescope Two Foot *Focus*, magnifying about 70 times; the Person who observed it says, that the Thread of Light between *Mercury* and the Sun's Limb was so small, as scarcely to amount to the 20th or 30th Part of *Mercury's* Diameter.

The following Differences of Right Ascension between the Sun's preceding Limb and Mercury, were taken at Mr. Short's House.

Sun's preceding Limb touched the	}	h.	'	"
Wire at		10.	58.	55.
<i>Mercury</i> touched the same Wire at		10.	59.	40.

Sun's preceding Limb touched the	}			
Wire at		11.	48.	4.
<i>Mercury</i> touched the same Wire at .		11.	48.	32.
Sun's subsequent Limb touched the	}			
same Wire at		11.	50.	20.

Sun's preceding Limb touched the	}			
Wire at		11.	49.	20.
<i>Mercury</i> touched the same Wire at		11.	49.	46.

Sun's preceding Limb touched the	}			
Wire at		11.	51.	9.
<i>Mercury</i> touched the same Wire at		11.	51.	36.

Sun's preceding Limb touched the	}			
Wire at		12.	1.	33.
<i>Mercury</i> touched the same Wire at		12.	1.	57.

Mr. *Graham* got an Observation made by a Person in his Neighbourhood, by which it appears, that
at

at 11^h, 59', 50", *Mercury* preceded the Sun's Centre 42" in Right Ascension.

The Sky clearing up towards One o'Clock, the following Times were observed at Mr. *Graham's* House with great Accuracy.

	h.	'	"
Last interior Contact at	1.	0.	42.
End, or <i>Mercury</i> just leaving the	}	1.	2.
Sun's Limb at			

This last Observation agrees to a Second with the same Observation made by Dr. *Bevis* at Mr. *Sisson's* House in the *Strand*.

During the time of these Observations it blew a violent Gale of Wind, so that both Observers and Instruments were somewhat disturbed.

IV. *Eclipse of the Moon, Oct. 22. 1743. in the Morning, observed at Mr. Graham's House in Fleetstreet.*

Read Nov. 3.
1743.

THE Sky was mostly overcast with Clouds, so that the following Observations are the only ones that could be made with any Degree of Certainty.

	h.	'	"
Beginning of the Eclipse about	1.	21.	0.
The Shade touched <i>Copernicus</i> about	1.	39.	0.
touched <i>Plato</i> about	1.	45.	0.
touched <i>Tycho</i> about	1.	51.	0.
Total Immersion about	2.	17.	0.

V. *Part*